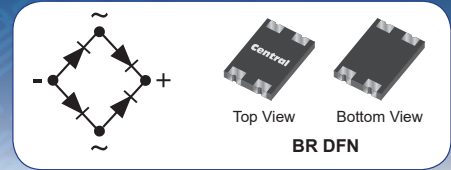


RoHS & REACH Compliant

Schottky Bridge Rectifiers in low profile BR DFN package

1.0A, 40-100V | **2.0A, 40-100V** | **3.0A, 40-60V***



Central Semiconductor's **CBRDFSH Schottky Bridge Rectifier series** was designed to meet designers' requirements for smaller and lower profile devices necessary to reduce overall product size. This series provides a variety of current and voltage options. Each device is packaged in the low profile BR DFN surface mount case and features highly desirable energy efficiency. These full wave bridge rectifiers utilize individual glass passivated die to reduce leakage and improve performance and reliability. Ideal for any application requiring a space saving and energy efficient Schottky bridge rectifier, including Power over Ethernet (PoE) and intelligent lighting.

Features

- Low forward voltage (V_F) as low as 500mV
- High current range (1.0A-3.0A)
- Low profile BR DFN package (1.22mm)

Applications

- Power over Ethernet (PoE)
 - networks
 - cameras
 - speakers
 - point of sale terminals
- Intelligent lighting

Benefits

- Energy efficiency
- Space savings
- Low profile package
- RoHS and REACH compliant

Central Part No.	Maximum Ratings ($T_A=25^\circ\text{C}$)			Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)					
	I_O	V_{RRM}	T_J, T_{stg}	V_F		$@ I_F$	I_R		$@ V_R$
	(A) MAX	(V) MAX	($^\circ\text{C}$) MAX	(mV) TYP	(mV) MAX	(A)	(μA) TYP	(μA) MAX	(V)
CBRDFSH1-40	1.0	40	-55 to +125	490	500	1.0	10	200	40
CBRDFSH1-60	1.0	60	-55 to +125	600	700	1.0	10	200	60
CBRDFSH1-100	1.0	100	-55 to +125	800	850	1.0	1.0	200	100
CBRDFSH2-40	2.0	40	-55 to +125	490	520	2.0	25	200	40
CBRDFSH2-60	2.0	60	-55 to +125	600	700	2.0	10	200	60
CBRDFSH2-100	2.0	100	-55 to +125	800	850	2.0	0.5	200	100
CBRDFSH3-40*	3.0	40	-55 to +125	530	550	3.0	10	200	40
CBRDFSH3-60*	3.0	60	-55 to +125	670	700	3.0	5.0	200	60

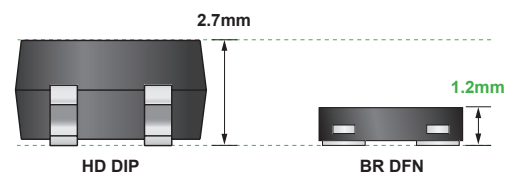
* Devices currently under development, preliminary data

Custom solutions also available:

- custom device development
- special wafer diffusion
- custom interconnect options
- packaging options
- specialized parametric testing
- up-screening to MIL standard equivalents or to customer specific criteria

Package profile comparison:

BR DFN has a **54% lower profile** than HD DIP.



SPICE Models and other technical resources:

Visit www.centalsemi.com to download SPICE models for these devices.

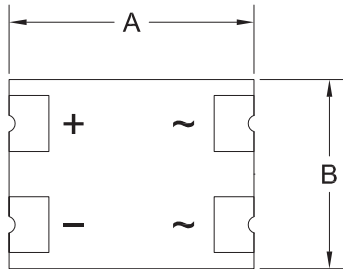
RoHS and REACH compliance declarations

Visit the Quality section of Central's website to access.

CBRDFSH Series Schottky Bridge Rectifiers in the low profile BR DFN package

1.0A, 40-100V
2.0A, 40-100V
3.0A, 40-60V*

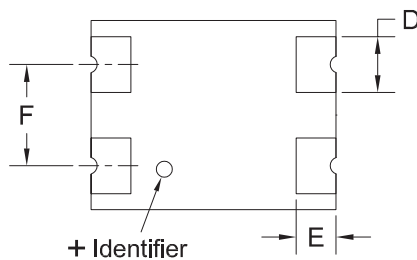
Mechanical Drawing: BR DFN



TOP VIEW



SIDE VIEW



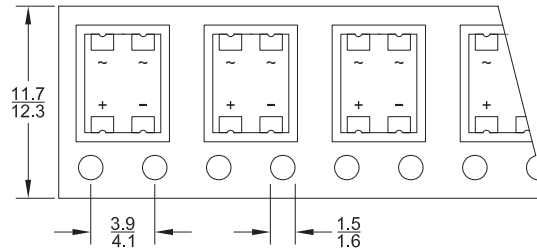
BOTTOM VIEW R1

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.238	0.246	6.05	6.25
B	0.183	0.191	4.65	4.85
C	0.032	0.048	0.81	1.22
D	0.053	0.057	1.35	1.45
E	0.037	0.041	0.95	1.05
F	0.098	0.102	2.49	2.59

BR DFN (REV: R1)

Tape Dimensions and Orientation (Dimensions in mm)

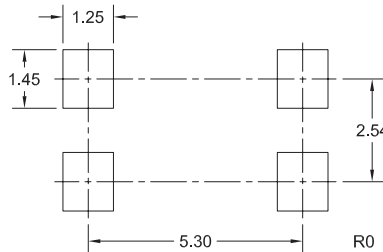
Tape Width: 12mm



Devices are taped in accordance with Electronic Industries Association Standard EIA-481-D

← Direction of Unreeling

Mounting Pad Geometry (Dimensions in mm)



Packaging Base

Reel Size	Quantity	Central Part No.
13"	5,000 pcs.	All part numbers in CBRDFSH TR13 Series.

Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
13"	5	25,000	15x4x15	38x10x38	9	5
	14	70,000	15x15x9	38x38x23	23	11
	26	130,000	15x15x18	38x38x46	42	20

Ordering Information & Marking Code

Central Part No.	Marking Code	Orderable Part No.
CBRDFSH1-40	SH1-40	Add "TR13" as suffix to Central Part No. (ex: CBRDFSH1-40 TR13)
CBRDFSH1-60	SH1-60	
CBRDFSH1-100	SH1100	
CBRDFSH2-40	SH2-40	
CBRDFSH2-60	SH2-60	
CBRDFSH2-100	SH2100	
CBRDFSH3-40	SH3-40	
CBRDFSH3-60	SH3-60	

For more information on Central's products and potential solutions:

Call us at: **1.631.435.1110**

Or view online: www.centrasemi.com/featured-products

